

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/830,400B
Source: IFW/b
Date Processed by STIC: 1/5/05

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 01/05/2005

PATENT APPLICATION: US/09/830,400B

TIME: 10:53:50

Input Set : A:\20363-015.txt

Output Set: N:\CRF4\01052005\I830400B.raw

```

4 <110> APPLICANT: Nadler, Lee M.
5   Hahn, William C.
6   Schultz, Joachim L.
7   Vonderheide, Robert H.
10 <120> TITLE OF INVENTION: CANCER IMMUNOTHERAPY AND DIAGNOSIS USING
11   UNIVERSAL TUMOR ASSOCIATED ANTIGENS, SUCH AS THE TELOMERASE
12   CATALYTIC SUBUNIT (hTERT), AND METHODS FOR IDENTIFYING
13   UNIVERSAL TUMOR ASSOCIATED ANTIGENS
16 <130> FILE REFERENCE: 20363-015NATL
18 <140> CURRENT APPLICATION NUMBER: US 09/830,400B
19 <141> CURRENT FILING DATE: 2001-07-20
21 <150> PRIOR APPLICATION NUMBER: PCT/US99/25438
22 <151> PRIOR FILING DATE: 1999-10-29
24 <150> PRIOR APPLICATION NUMBER: US 60/106,106
25 <151> PRIOR FILING DATE: 1998-10-29
27 <160> NUMBER OF SEQ ID NOS: 73
29 <170> SOFTWARE: FastSEQ for Windows Version 4.0
32 <210> SEQ ID NO: 1
33 <211> LENGTH: 9
34 <212> TYPE: PRT
35 <213> ORGANISM: Homo sapiens
37 <400> SEQUENCE: 1
38 Ile Leu Ala Lys Phe Leu His Trp Leu
39 1          5
43 <210> SEQ ID NO: 2
44 <211> LENGTH: 9
45 <212> TYPE: PRT
46 <213> ORGANISM: Homo sapiens
48 <400> SEQUENCE: 2
49 Lys Leu Phe Gly Val Leu Arg Leu Lys
50 1          5
54 <210> SEQ ID NO: 3
55 <211> LENGTH: 9
56 <212> TYPE: PRT
57 <213> ORGANISM: Homo sapiens
59 <400> SEQUENCE: 3
60 Glu Leu Leu Arg Ser Phe Phe Tyr Val
61 1          5
65 <210> SEQ ID NO: 4
66 <211> LENGTH: 9
67 <212> TYPE: PRT
68 <213> ORGANISM: Homo sapiens
70 <400> SEQUENCE: 4

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/830,400B

DATE: 01/05/2005

TIME: 10:53:50

Input Set : A:\20363-015.txt

Output Set: N:\CRF4\01052005\I830400B.raw

```

71 Arg Leu Val Asp Asp Phe Leu Leu Val
72 1 5
76 <210> SEQ ID NO: 5
77 <211> LENGTH: 9
78 <212> TYPE: PRT
79 <213> ORGANISM: Homo sapiens
81 <400> SEQUENCE: 5
82 Phe Leu Trp Gly Pro Arg Ala Leu Val
83 1 5
87 <210> SEQ ID NO: 6
88 <211> LENGTH: 9
89 <212> TYPE: PRT
90 <213> ORGANISM: Homo sapiens
92 <400> SEQUENCE: 6
93 His Phe Leu Leu Trp Lys Leu Ile Ala
94 1 5
98 <210> SEQ ID NO: 7
99 <211> LENGTH: 9
100 <212> TYPE: PRT
101 <213> ORGANISM: Homo sapiens
103 <400> SEQUENCE: 7
104 Ala His Thr Lys Asp Gly Phe Asn Phe
105 1 5
109 <210> SEQ ID NO: 8
110 <211> LENGTH: 10
111 <212> TYPE: PRT
112 <213> ORGANISM: Homo sapiens
114 <400> SEQUENCE: 8
115 Lys Leu Thr Arg His Arg Val Thr Tyr Val
116 1 5 10
120 <210> SEQ ID NO: 9
121 <211> LENGTH: 10
122 <212> TYPE: PRT
123 <213> ORGANISM: Homo sapiens
125 <400> SEQUENCE: 9
126 Leu Leu Leu Asp Thr Arg Thr Leu Glu Val
127 1 5 10
131 <210> SEQ ID NO: 10
132 <211> LENGTH: 10
133 <212> TYPE: PRT
134 <213> ORGANISM: Homo sapiens
136 <400> SEQUENCE: 10
137 Phe Leu His Trp Leu Met Ser Val Tyr Val
138 1 5 10
142 <210> SEQ ID NO: 11
143 <211> LENGTH: 10
144 <212> TYPE: PRT
145 <213> ORGANISM: Homo sapiens
147 <400> SEQUENCE: 11

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/830,400B

DATE: 01/05/2005

TIME: 10:53:50

Input Set : A:\20363-015.txt

Output Set: N:\CRF4\01052005\I830400B.raw

```

148 Phe Leu Leu Lys Leu Thr Arg His Arg Val
149 1 5 10
153 <210> SEQ ID NO: 12
154 <211> LENGTH: 10
155 <212> TYPE: PRT
156 <213> ORGANISM: Homo sapiens
158 <400> SEQUENCE: 12
159 Trp Leu Met Ser Val Tyr Val Val Glu Leu
160 1 5 10
164 <210> SEQ ID NO: 13
165 <211> LENGTH: 10
166 <212> TYPE: PRT
167 <213> ORGANISM: Homo sapiens
169 <400> SEQUENCE: 13
170 Gly Leu Phe Asp Val Phe Leu Arg Phe Met
171 1 5 10
175 <210> SEQ ID NO: 14
176 <211> LENGTH: 9
177 <212> TYPE: PRT
178 <213> ORGANISM: Homo sapiens
180 <400> SEQUENCE: 14
181 Leu Leu Ala Arg Cys Ala Leu Phe Val
182 1 5
186 <210> SEQ ID NO: 15
187 <211> LENGTH: 9
188 <212> TYPE: PRT
189 <213> ORGANISM: Homo sapiens
191 <400> SEQUENCE: 15
192 Trp Leu Cys His Gln Ala Phe Leu Leu
193 1 5
197 <210> SEQ ID NO: 16
198 <211> LENGTH: 10
199 <212> TYPE: PRT
200 <213> ORGANISM: Homo sapiens
202 <400> SEQUENCE: 16
203 Val Glu Leu Leu Arg Ser Phe Phe Tyr Val
204 1 5 10
208 <210> SEQ ID NO: 17
209 <211> LENGTH: 9
210 <212> TYPE: PRT
211 <213> ORGANISM: Homo sapiens
213 <400> SEQUENCE: 17
214 Phe Leu Trp Gly Pro Arg Ala Leu Val
215 1 5
219 <210> SEQ ID NO: 18
220 <211> LENGTH: 9
221 <212> TYPE: PRT
222 <213> ORGANISM: Homo sapiens
224 <400> SEQUENCE: 18

```

RAW SEQUENCE LISTING

DATE: 01/05/2005

PATENT APPLICATION: US/09/830,400B

TIME: 10:53:50

Input Set : A:\20363-015.txt

Output Set: N:\CRF4\01052005\I830400B.raw

225 Leu Leu Phe Gly Tyr Pro Val Tyr Val
226 1 5
230 <210> SEQ ID NO: 19
231 <211> LENGTH: 9
232 <212> TYPE: PRT
233 <213> ORGANISM: Homo sapiens
235 <400> SEQUENCE: 19
236 Phe Leu Trp Gly Pro Arg Ala Leu Val
237 1 5
241 <210> SEQ ID NO: 20
242 <211> LENGTH: 9
243 <212> TYPE: PRT
244 <213> ORGANISM: Homo sapiens
246 <400> SEQUENCE: 20
247 Gly Ile Leu Gly Phe Val Phe Thr Leu
248 1 5
252 <210> SEQ ID NO: 21
253 <211> LENGTH: 9
254 <212> TYPE: PRT
255 <213> ORGANISM: Homo sapiens
257 <400> SEQUENCE: 21
258 Tyr Ala Glu Thr Lys His Phe Leu Tyr
259 1 5
263 <210> SEQ ID NO: 22
264 <211> LENGTH: 10
265 <212> TYPE: PRT
266 <213> ORGANISM: Homo sapiens
268 <400> SEQUENCE: 22
269 Val Val Glu Leu Leu Arg Ser Phe Phe Tyr
270 1 5 10
274 <210> SEQ ID NO: 23
275 <211> LENGTH: 9
276 <212> TYPE: PRT
277 <213> ORGANISM: Homo sapiens
279 <400> SEQUENCE: 23
280 Ile Ser Asp Thr Ala Ser Leu Cys Tyr
281 1 5
285 <210> SEQ ID NO: 24
286 <211> LENGTH: 9
287 <212> TYPE: PRT
288 <213> ORGANISM: Homo sapiens
290 <400> SEQUENCE: 24
291 Glu Val Asp Pro Ile Gly His Leu Tyr
292 1 5
296 <210> SEQ ID NO: 25
297 <211> LENGTH: 9
298 <212> TYPE: PRT
299 <213> ORGANISM: Homo sapiens
301 <400> SEQUENCE: 25

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/830,400B

DATE: 01/05/2005

TIME: 10:53:50

Input Set : A:\20363-015.txt

Output Set: N:\CRF4\01052005\I830400B.raw

302 Cys Thr Glu Leu Lys Leu Ser Asp Tyr
303 1 5
307 <210> SEQ ID NO: 26
308 <211> LENGTH: 9
309 <212> TYPE: PRT
310 <213> ORGANISM: Homo sapiens
312 <400> SEQUENCE: 26
313 Gly Leu Phe Asp Val Phe Leu Arg Phe
314 1 5
318 <210> SEQ ID NO: 27
319 <211> LENGTH: 9
320 <212> TYPE: PRT
321 <213> ORGANISM: Homo sapiens
323 <400> SEQUENCE: 27
324 Arg Leu Arg Glu Glu Ile Leu Ala Lys
325 1 5
329 <210> SEQ ID NO: 28
330 <211> LENGTH: 9
331 <212> TYPE: PRT
332 <213> ORGANISM: Homo sapiens
334 <400> SEQUENCE: 28
335 Ile Leu Arg Gly Ser Val Ala His Lys
336 1 5
340 <210> SEQ ID NO: 29
341 <211> LENGTH: 9
342 <212> TYPE: PRT
343 <213> ORGANISM: Homo sapiens
345 <400> SEQUENCE: 29
346 Tyr Val Thr Glu Thr Thr Phe Gln Lys
347 1 5
351 <210> SEQ ID NO: 30
352 <211> LENGTH: 9
353 <212> TYPE: PRT
354 <213> ORGANISM: Homo sapiens
356 <400> SEQUENCE: 30
357 Gln Thr Val Cys Thr Asn Ile Tyr Lys
358 1 5
362 <210> SEQ ID NO: 31
363 <211> LENGTH: 9
364 <212> TYPE: PRT
365 <213> ORGANISM: Homo sapiens
367 <400> SEQUENCE: 31
368 Lys Thr Phe Leu Arg Thr Leu Val Arg
369 1 5
373 <210> SEQ ID NO: 32
374 <211> LENGTH: 9
375 <212> TYPE: PRT
376 <213> ORGANISM: Homo sapiens
378 <400> SEQUENCE: 32

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/830,400B

DATE: 01/05/2005

TIME: 10:53:51

Input Set : A:\20363-015.txt

Output Set: N:\CRF4\01052005\I830400B.raw